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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,068	03/01/2002	Torsten Grust	SVL920010034US1	4243
23589	7590	08/10/2005	EXAMINER	
HOVEY WILLIAMS LLP 2405 GRAND BLVD., SUITE 400 KANSAS CITY, MO 64108			NGUYEN, CINDY	
			ART UNIT	PAPER NUMBER
			2161	
DATE MAILED: 08/10/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/090,068

Applicant(s)

GRUST ET AL

Examiner

Cindy Nguyen

Art Unit

2171

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/25/05 has been entered.

### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claims to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

In the present case, claims 1, 6 and 9 only recites an abstract idea. The recites steps receiving the queries and convert the queries the steps does not apply, involve, use, or advance the technological arts since all the recited steps can be performed without a computer. These steps only constitute an idea of how to managing and issuing a search request.

### **1. *Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**2. Claims 1-3, 6, 9-11, 14-16, 19-21, 24-26 and 29-31 stand rejected under 35 U.S.C. 102(e) as being anticipated by Blakeley et al. (US 5826077) (Blakeley).**

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Regarding claims 1, 6, 9, 14, 24 Blakeley discloses: A method of managing a relational database comprising:

a. receiving queries in a query language the queries comprising a plurality of query terms (col. 8, lines 43-55, col. 9, lines 46-col. 10, lines 6, Blakeley);

b. interpreting the queries by associating at least one declarative language function with the query terms (col. 10, lines 13-10 and col. 12, lines 6-60, Blakeley);

c. converting the queries represented by the at least one declarative language function to a plurality of imperative language statement (col. 11, lines 66 to col. 12, lines 9, col. 13, lines 20-64, Blakeley); and

d. executing the imperative language statements (col. 19, lines 51-65, Blakeley).

Regarding claim 6, Blakeley discloses: A method of managing a relational database comprising:

a. receiving queries in a query language (the client submits these queries in an SQL format to a database engine for processing, page 3, 0037, Blakeley);

b. converting the query language to an imperative language representation of a declarative language representation of the queries in accordance with a declarative language paradigm (the application server then converts the SQL protocol command or rowset changes to a programming language, page 3, 0038-0039, Blakeley); and

c. executing the imperative language queries (executes the programming language, page 3, 0038-0039, Blakeley).

As per claim 19, all the limitations of these claims have been noted in the rejection of claim 6 and 14. It is therefore rejected as set forth above.

As per claims 24 and 29, it is the program product of claim 1 and 9, all the limitations of these claims have been noted in the rejection of claim 6 and 14. It is therefore rejected as set forth above.

Regarding claims 2, 10, 15, 20, 25, 30 all the limitations of these claims have been noted in the rejection of claims 1, 9, 14, 19, 24 and 29 above, respectively. In addition, Blakeley discloses: comprising converting the query language to an intermediate tree representation corresponding to the at least one declarative language function associated with the plurality of query terms, and thereafter converting the query to at least one data structure that is interpreted by an imperative language interpreter core to perform the queries (col. 13, lines 20 to col. 14, lines 15, Blakeley).

Regarding claims 3, 11, 16, 21, 26, 31 all the limitations of these claims have been noted in the rejection of claims 2, 10, 15, 20, 25 and 30 above, respectively. In addition, Blakeley discloses: wherein the declarative language function is identified by a pointer to further code such that the declarative language function is treated as data within the plurality of imperative language statements (col. 12, lines 32 to col. 14, lines 40, Blakeley).

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**3. Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**4. Claims 4, 7, 12, 17, 22, 27 and 32 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Blakeley et al. (U.S 5826077) (Blakeley) in view of Steele JR. et al. (U.S 2001/0056420) (Steele).**

Regarding claims 4, 7, 12, 17, 22, 27 and 32, all the limitations of these claims have been noted in the rejection of claim 1, 6, 9, 14, 19, 24 and 29 above, respectively. However, Blakeley didn't disclose: wherein the declarative language is chosen from the group consisting of ML, LISP, and HASKELL. On the other hand, Steele discloses: ML, LISP and HASKELL . Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the ML, LISP, HASKELL in the system of Blakeley as taught by Steele. The motivation being to enable system uses declarative language (they can be ML, LISP, HASKELL or a like) due to programming conventions for converting database record to correspond to the query request as modified by the client computer system.

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**5. Claims 5, 8, 13, 18, 23, 28 and 33 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Blakeley et al. (5826077) (Blakeley) in view of Agesen (U.S 6711672).**

Regarding claims 5, 8, 13, 18, 23, 28 and 33 all the limitations of this claim have been noted in the rejection of claims 1, 6, 9, 14, 19, 24 and 29 above, respectively. However, Blakeley didn't disclose: wherein the imperative language is chosen from the group consisting of C, C++, Java, Modula2, and SmallTalk. On the other hand, Agesen discloses: wherein the imperative language is chosen from the group consisting of C, C++, Java, Modula2, and SmallTalk (col. 2, lines 34-49, Agesen). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the C, C++, Java, Modula2, and SmallTalk in the system of Blakeley as taught by Agesen. The motivation being to enable system uses high level programming languages due to programming conventions for converting database record to correspond to the query request as modified by the client computer system.

#### **6. *Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 703-305-4698. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers



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for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Cindy Nguyen

July 28, 2005



**FRANTZ COBY**  
**PRIMARY EXAMINER**